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10/038,124	01/02/2002	Ronald John Vanderhelm	034300-192	7461

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EXAMINER	
LE, DANH C	

ART UNIT	PAPER NUMBER
2683	7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,124	Applicant(s) VANDERHELM, RONALD JOHN	
	Examiner DANH C LE	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 01/31/03 (paper # 6) has been considered by the examiner and made of record in the application file.

Drawings

2. The drawings were received on 02/27/02. These drawings are accepted by the examiner.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-10, 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-10, 16-18 are indefinite because they recite the method, which perform the system of claim 1 and claim 11. For the purpose of examination, the examiner considers these claims are the system claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 2, 4, 9, 11, 12, 17, 27, 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Harrell (US 6,778,519).**

As to claim 1, Harrell teaches a core wireless engine design (figure 2, 72) comprising:

a transceiver (RF transceiver);

a microprocessor (PCDSP); and

a standardized interface (interface) arrangement, the standardized interface arrangement adapted to be interconnected to a variety of host interfaces (col.9, lines 11-21).

As to claim 2, Harrell teaches the core wireless engine design of Claim 1 wherein the core wireless engine is designed to fit into a variety of form factor units (col.2, lines 33-44, 57-62).

As to claim 4, Harrell teaches the system including the core wireless engine design of Claim 1, further including a host interface interconnected to the standardized interface arrangement (col.8, line 64-col.9, line 19).

As to claim 9, Harrell teaches the method of Claim 1 wherein the standardized size is less than 5 millimeters wide (col.1, lines 30-40).

As to claim 11, Harrell teaches a core wireless engine design (figure 2, 72) comprising:

a transceiver (RF transceiver);

a microprocessor (PCDSP); and

a standardized interface (interface) arrangement, the standardized interface arrangement adapted to be interconnected to a variety of host interfaces, wherein the core wireless design is adapted to fit into a variety of form factor units (col.2, lines 33-44, 57-62, col.9, lines 11-21).

As to claim 12, Harrell teaches the system including the core wireless design of Claim 11 wherein the system further includes a host interface (col.8, line 64-col.9, line 19).

As to claim 17, Harrell teaches the method of Claim 11 wherein the standardized size is less than 5 millimeters thick (col.1, lines 30-40).

As to claim 27, Harrell teaches the method of producing a wireless modem unit (figure 2):

selecting a core wireless design from a number of core wireless engine designs (host x-host y), each core wireless engine design having a standardized interface arrangement (transceiver) adapted to be interconnected to a variety of host interfaces and the core wireless design adapted to fit into a variety of form factor units (col.9, lines 11-19);

selecting a host interface and form factor unit from the variety of host interfaces and variety of form factor units and combining the selected core wireless design and selected host interface and form factor unit to produce a wireless modem unit (col.3, line 61-col.4, line 17 and col.9, lines 11-40).

As to claim 32, Harrell teaches the method of Claim 27 wherein the core wireless engine includes a printed circuit board that is offset from the center of the core wireless engine design (figure 5, 190).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 3, 6- 8, 15, 16, 19, 20, 22-25, 28-30 are rejected under 35 U.S.C 103(a) as being unpatentable over Harrell in view of Inagaki (US 2002/0054232).**

As to claim 3, Harrell teaches the core wireless engine design of Claim 2 wherein the core wireless engine is designed to fit within PCMCIA. Harrell fails to teach the core wireless engine also fits Compact Flash cards. Inagaki teaches the interfaces and connectors, cards in conformity with PCMCIA card standards and cards in conformity with Compact Flash card standards may be used (paragraph 0039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Inagaki into the system of Harrell in order

to transmit/receive image data and management information to/from other peripheral devices as Inagaki suggested (paragraph 0039).

As to claim 6, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 7, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 8, Harrell teaches the system of Claim 1. Harrell fails to teach the variety of form factors includes a Compact Flash form factor. Inagaki teaches the variety of form factors includes a Compact Flash form factor (paragraph 0039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Inagaki into the system of Harrell in order to transmit/receive image data and management information to/from other peripheral devices as Inagaki suggested (paragraph 0039).

As to claim 15, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 16, the limitation of the claim is the same limitation of claim 8; therefore, the claim is interpreted and rejected as set forth as claim 8.

As to claim 19, Harrell teaches the core wireless engine design (figure 2, 72) comprising:

a transceiver (transceiver);

a microprocessor (PCDSP); and

a standardized interface arrangement, wherein the core wireless design adapted to fit into a variety of form factor units including PCMCIA (col.9, lines 11-19).

Harrell fails to teach form factor unit including the Compact Flash cards. Inagaki teaches form factor unit including the Compact Flash cards (paragraph 0039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Inagaki into the system of Harrell in order to transmit/receive image data and management information to/from other peripheral devices as Inagaki suggested (paragraph 0039).

As to claim 20, Harrell teaches the core wireless engine design of Claim 19 wherein the core wireless design is further adapted to fit within the form factor of a mini PCI card (col.10, lines 18-32).

As to claim 22, Harrell teaches the core wireless engine design of Claim 19 wherein the standardized interface arrangement is adapted to be interconnected to a variety of host interfaces (col.9, lines 11-19).

As to claim 23, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 24, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 25, Harrell teaches the core wireless engine design of Claim 19 wherein the standardized size is less than 5 millimeters thick (col.1, lines 30-41).

As to claim 28, the limitation of the claim is the same limitation of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 29, the limitation of the claim is the same limitation of claim 8; therefore, the claim is interpreted and rejected as set forth as claim 8.

As to claim 30, Harrell teaches the method of Claim 27 wherein the standardized size is less than 5 millimeters thick (col.1, lines 30-41).

8. **Claims 10, 18, 26 and 31 are rejected under 35 U.S.C 103(a) as being unpatentable over Harrell in view of Endejan (US 2002/0063162).**

As to claim 10, Harrell teaches the method of Claim 1, Harrell fails to teach the standardized size is less than 36 millimeters wide and 41 millimeters high. Endejan teaches the standardized size is less than 36 millimeters wide and 41 millimeters high (paragraph 0005). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Endejan into the system of Harrell in order to convenient for using and easily carried by the user as Endejan suggested (paragraph 0005).

As to claim 18, the limitation of the claim is the same limitation of claim 10; therefore, the claim is interpreted and rejected as set forth as claim 10.

As to claim 26, the limitation of the claim is the same limitation of claim 10; therefore, the claim is interpreted and rejected as set forth as claim 10.

As to claim 31, the limitation of the claim is the same limitation of claim 10; therefore, the claim is interpreted and rejected as set forth as claim 10.

9. **Claims 5, 13, 14 are rejected under 35 U.S.C 103(a) as being unpatentable over Harrell in view of Ledzius (US 6,539,438).**

As to claim 5, Harrell teaches the system of Claim 4, Harrell fails to teach a field programmable gate array and the host interface is positioned within the field programmable gate array. Ledzius teaches a field programmable gate array and the host interface is positioned within the field programmable gate array (col.4, lines 44-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Ledzius into the system of Harrell in order to provide implementation in and benefit a portable computing environment without changing the basic functionality and claimed functionality of the reconfigurable compute system as Ledzius suggested (col.4, lines 44-56).

As to claim 13, the limitation of the claim is the same limitation of claim 5; therefore, the claim is interpreted and rejected as set forth as claim 5.

As to claim 14, the combination of Harrell and Ledzius teaches the core wireless engine design of Claim 11 wherein the standardized interface arrangement includes a standardized set of registers (Ledzius, col.10, lines 6-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Ledzius into the system of Harrell in order to provide implementation in and benefit a portable computing environment without changing the basic functionality and claimed functionality of the reconfigurable compute system as Ledzius suggested (col.4, lines 44-56).

10. **Claim 21 is rejected under 35 U.S.C 103(a) as being unpatentable over Harrell in view of Shiozaki (US 2002/0176223).**

As to claim 21, Harrell teaches the core wireless engine design of Claim 19 wherein the core wireless engine is further adapted to fit within a PC board. Harrell fails to teach fitting within a Handspring Visor Springboard card. Shiozaki teaches fitting within a Handspring Visor Springboard card (paragraph 0005). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Shiozaki into the system of Harrell in order to add more modules and cellular communication capabilities as Shiozaki suggested (paragraph 0005).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Johnson et al (US 2002/0118135) teaches retractable antenna for electronic devices.

B. Borgatti et al (US 2002/0108009) teaches electronic system having modular expansion function facilities.

C. Wilson (2001/0007803) teaches methods and apparatus for preventing damage to memory cards, memory card connectors and other electronics devices.

D. Price et al (US 2003/0040222) teaches modular plug receptacles defined by multiple electronic components.

E. Paredes et al (US 2002/0118507) teaches multiple form factor PC card system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2004

DANH CONG LE
PATENT EXAMINER